

## National Institute of Neurological Disorders and Stroke

[Accessible version](#)[Home](#)[About NINDS](#)[Disorders](#)[Funding](#)[News & Events](#)[Find People](#)[Jobs & Training](#)**Science for the Brain**

The nation's leading supporter of biomedical research on disorders of the brain and nervous system

[Browse all disorders](#)[Browse all health organizations](#)**More about****Fabry's Disease**[Studies with patients](#)[Research literature](#)[Press releases](#)[Disclaimer](#)**Search NINDS...** [\(help\)](#)[Contact us](#)[My privacy](#)

NINDS is part of the  
[National Institutes of Health](#)

**NINDS Fabry's Disease Information Page**

Reviewed 2-25-2003

[Get Web page suited for printing](#)[Email this to a friend or colleague](#)**Table of Contents (click to jump to sections)**[What is Fabry's Disease?](#)[Is there any treatment?](#)[What is the prognosis?](#)[What research is being done?](#)[Organizations](#)

BEST AVAILABLE COPY

**What is Fabry's Disease?**

Fabry disease is a fat storage disorder caused by a deficiency of an enzyme involved in the biodegradation of lipids. The gene that is altered in this disorder is on the X-chromosome, so only the mother needs to be a carrier to produce an affected child. Her sons have a 50 percent chance of having the condition, and her daughters have a 50 percent chance of being a carrier. Some of the female carriers exhibit signs of the condition, especially cloudiness of the cornea. In addition to the eye manifestations, males characteristically have burning sensations in their hands and feet that is worse with exercise and hot weather. Most of the males have small, raised, reddish-purple blemishes on their skin. As they grow older, they may have impaired arterial circulation leading to early heart attacks and strokes. The kidneys become progressively involved, and many patients have required kidney transplantation or dialysis. A number of patients have gastrointestinal difficulties characterized by frequent bowel movements shortly after eating. This disorder is due to a deficiency of a lipid breakdown enzyme known as *ceramidetrihexosidase*, also called *alpha-galactosidase A*. Its function is to cleave to a molecule of galactose from a lipid that arises primarily from old red blood cells.

**Is there any treatment?**

The pain in the hands and feet usually responds to medications such as Tegretol (carbamazepine) and dilantin. Gastrointestinal hyperactivity may be treated with metoclopramide or Lipisorb® (a nutritional supplement). Recent experiments indicate that enzyme replacement is effective therapy for patients with this disorder.

**What is the prognosis?**

Patients with Fabry disease usually survive into adulthood, but they are at risk for strokes, heart attacks, and kidney damage. It is anticipated that enzyme replacement and eventually gene therapy will eliminate these difficulties.

**What research is being done?**

NINDS supports research to find ways to treat and prevent lipid storage disorders such as Fabry disease.

[Select this link](#) to view a list of studies currently seeking patients.

**Organizations**

**Fabry Support & Information Group**

108 NE 2nd Street  
P.O. Box 510  
Concordia, MO 64020-0510  
[fabry@fabry.org](mailto:fabry@fabry.org)  
<http://www.fabry.org>  
Tel: 660-463-1355  
Fax: 660-463-1356

**Association for Neuro-Metabolic Disorders**

c/o Cheryl Volk  
5223 Brookfield Lane  
Sylvania, OH 43560  
[VOLK4OLKS@aol.com](mailto:VOLK4OLKS@aol.com)  
Tel: 419-885-1497

BEST COPY AVAILABLE

**National Tay-Sachs and Allied Diseases Association**

2001 Beacon Street  
Suite 204  
Boston, MA 02135  
[info@ntsad.org](mailto:info@ntsad.org)  
<http://www.ntsad.org>  
Tel: 617-277-4463 800-90-NTSAD (906-8723)  
Fax: 617-277-0134

**National Organization for Rare Disorders (NORD)**

P.O. Box 1968  
(55 Kenosia Avenue)  
Danbury, CT 06813-1968  
[orphan@rarediseases.org](mailto:orphan@rarediseases.org)  
<http://www.rarediseases.org>  
Tel: 203-744-0100 Voice Mail 800-999-NORD (6673)  
Fax: 203-798-2291

---

NINDS health-related material is provided for information purposes only and does not necessarily represent endorsement by or an official position of the National Institute of Neurological Disorders and Stroke or any other Federal agency. Advice on the treatment or care of an individual patient should be obtained through consultation with a physician who has examined that patient or is familiar with that patient's medical history.

All NINDS-prepared information is in the public domain and may be freely copied. Credit to the NINDS or the NIH is appreciated.

---

Provided by:  
The National Institute of Neurological Disorders and Stroke  
National Institutes of Health  
Bethesda, MD 20892

[Return to top](#)

---

[Home](#) | [About NINDS](#) | [Disorders](#) | [Funding](#) | [News & Events](#) | [Find People](#) | [Jobs & Training](#) | [Accessibility](#)



FOR OFFICIAL USE ONLY